

Alaska's unlikely littlest big predator leaves its mark on ecosystem

by Robin West

Frequently, visitors will ask staff at the Kenai National Wildlife Refuge what is the fiercest predator that lives in the area. Images have been conjured up of a large brown bear killing a moose with a single swipe of a paw, a pack of wolves taking down a caribou, or a wolverine, full of spit and vinegar, taking on creatures twice its size. For me, however, I think of an animal quite smaller, one that is barely noticed, but one that if it were 10 times larger, I would think twice about falling asleep in the woods.

About 15 years ago, I would fly regularly to a small remote cabin about an hour out of Fairbanks to run a small trapline. The cabin was barely large enough to stand upright in and had numerous cracks between the logs and chinking that guaranteed if the temperature were 30 below outside, the inside temperature would match it within an hour of the fire going out in the small sheet metal stove.

When the lantern would be turned off at night, the inside of the cabin would come alive with red-backed voles searching out bits of food and nesting material. The nightly racket and resulting mess led me to setting a half dozen mouse traps baited with oatmeal and peanut butter. The first night, after setting the traps, it was mere seconds after turning off the lantern that I started to hear scurrying about, then SNAP ...SNAP.

Soon all six traps had been set off, but then the noise increased. The traps sounded like they were being dragged across the rough lumber floor. I swan a flashlight across the darkened room only to find all six traps, containing dead voles, and four of them being fed upon by Alaska's littlest big predators, tiny shrews.

Many people think of shrews as mice, but they are very different in behavior, morphology and taxonomic classification. Unlike mice, which are classed as rodents, shrews are insectivores. Shrews are found throughout much of Alaska.

On the Kenai National Wildlife Refuge, the most prevalent shrew is the masked or common shrew.

Dusky shrews and pygmy shrews also may be found in the area. The average length of these animals is just a few inches and they generally weigh only a few grams (about what a stick of gum weighs). They are dark grayish colored with lighter colored bellies, have long pointed noses and long whiskers, short tails and tiny sharp teeth.

Shrews are solitary and always on the go. They are active in winter as well as summer, and, though they have very short legs, they can run fast enough that they often appear to be a small blur as they coot out in front of you. They must eat regularly and require good insulation from cold or they will die in a few hours.

At best, a shrew's life will end of natural causes at between 1 and 2 years. Predatory birds, cats, weasels and other predators, including other shrews prey upon them. Sometimes the preyed upon shrew is left intact after it has been killed, probably because of its strong musky odor.

Shrews eat insects and plant material but will consume any kind of fish or meat they can get. They have tiny eyes and poor vision but a good sense of hearing and smell. They are best at preying upon larger creatures when confined closely with them, such as when both animals have been caught in a live trap or pitfall.

In such situations, it is not uncommon for shrews to kill and feast upon mice and voles 3 to 5 times their size. Frozen carrion also may be fed upon, and I have witnessed small, thumb-sized holes drilled all the way through small animal carcasses in winter.

Shrews may be Alaska's smallest mammal, but their distribution, abundance, courage and bit appetites make them visible to almost everyone at some time or another. So the next you think you see a mouse, maybe instead you have caught a glimpse of Alaska's littlest big predator.

Robin West is a wildlife biologist by training and is the refuge manager of the [Kenai National Wildlife Refuge](#).